



**National Weather Service
Raleigh, NC
<http://weather.gov/Raleigh>**



Flood Safety Awareness Week March 12-16, 2012

The National Weather Service (NWS) has designated March 12-16, 2012, as the annual Flood Safety Awareness Week.

Nationwide, it floods somewhere in the United States nearly every day of the year. In the past 30 years, floods have claimed an average of 94 lives a year and the economic impacts of floods are growing. The annual average inflation-adjusted direct damage costs due to flooding have risen each of the past three decades from \$4.7 billion for 1981-1990, to \$7.9 billion for 1991-2000, to \$10.2 billion for 2001-2010.

Closer to home, in 2011 hurricane Irene made landfall near Cape Lookout on August 27nd and tracked northward across eastern North Carolina into southern New England. Irene produced a swath of rainfall exceeding 8 inches along and east of the interstate 95 corridor, resulting in widespread flooding. There were 2 deaths attributed to flooding from Irene, and flooding caused around 1.5 billion dollars in economic losses, which includes hundreds of millions of dollars' loss to the agricultural community.

The goals of Flood Safety Awareness Week are to inform the public about NWS forecast and warning services and flood safety information, heighten public awareness to the risks associated with all types of floods including flash flooding, storm surge, and those related to dam or levee failures, and empower citizens to take actions necessary to protect their lives and property.

2011 was a devastating year for flooding impacts and provided a clear example of why Americans depend on multi-agency water resource services like flood forecasts and warnings issued by the NWS, water observations provided by the USGS, water control and management provided by the U.S. Army Corps of Engineers, and the Federal Emergency Management Agency's efforts in flood preparedness and response.

In the spring and summer, there is an increased threat of flash flooding from thunderstorms in North Carolina. Then, later summer and fall increase the flood threat from tropical cyclones. As the state's infrastructure ages, increased stresses on dams, levees and bridges due to the seasonal impacts described above can heighten flood threats. Regardless of the cause, the NWS is committed to improving the timeliness and accuracy of river and flood forecasts and warnings necessary to help protect lives and livelihoods.

Water resources decision makers require new and more integrated information and services to adapt to the uncertainty of future climate, land-use changes, an aging water delivery infrastructure, and an increasing demand on limited resources. Dr. Thomas Graziano, Chief of the NWS Hydrologic Services Division, stated; "To address these growing challenges and to mitigate the death and destruction caused by floods, NOAA, the U.S. Army Corps of Engineers, and the U.S. Geological Survey, with complementary missions in water science, observation, prediction

and management, have formed a partnership entitled Integrated Water Resources Science and Services (IWRSS) to address the nation's water resources information and management needs. In May 2011, this partnership was formalized through a Memorandum of Understanding signed by the three agencies."

On February 21, 2012, NOAA commenced the official groundbreaking of the new National Water Center (NWC) on the campus of the University of Alabama in Tuscaloosa. Gary Carter, Director of the NWS Office of Hydrologic Development, stated, "The NWC will create a first-of-its-kind national center for water forecast operations, research and interagency coordination and serve as a catalyst for IWRSS. It will support the routine generation of enhanced water resources forecasts and information to more effectively manage the Nation's increasingly limited water supply and facilitate adaptive planning and management. The NWC will be ready for initial occupation in late fiscal year 2013 and be staffed by multiple federal partner water agencies to ensure strong coordination and collaboration."

Extensive information about flooding and flood safety, including educational materials, videos, brochures and news articles can be found online at:

<http://www.weather.gov/floodsafety>

Advanced Hydrologic Prediction Service

The Advanced Hydrologic Prediction Service (AHPS) is the NWS frontline solution for providing improved river and flood forecasting and water information across America. AHPS provides a suite of graphical and numeric products over the Internet to assist the public, community leaders and emergency managers in making better life- and cost-saving decisions about evacuations and movement of property before flooding occurs. The broad reach of AHPS extends the range of forecasts from short-term (up to 6 hours) to long-term (out to weeks and months). AHPS provides the public with more detailed and accurate answers to the following questions: How high will the river rise? When will the river reach its peak? Where will the flooding occur? How long will the flood last? How long will the drought continue? How certain is the forecast?

Your gateway to Web resources for central North Carolina provided through AHPS from the Raleigh NWS office begins here:

<http://water.weather.gov/ahps2/index.php?wfo=rah>

Turn Around Don't Drown™

Most flood-related deaths occur in motor vehicles when people attempt to drive through flooded roadways. Motor vehicles were involved in 68 of the 113 flood related deaths across the nation in 2011. Don't underestimate the power of flowing water across a road. It only takes 12 to 18 inches of water to cause a vehicle, even large SUVs, to float. Unknown to the driver, the road may even be washed away under the surface of the water, allowing the vehicle to be swept away with the flood current. The NWS has developed the flood safety slogan: Turn Around Don't Drown™ and hopes you will remember these words when you're faced with a flooded roadway and have that important decision to make. Be especially cautious when driving at night when it is harder to recognize flood dangers.

Floods, Droughts, and Other Related Phenomena.

Hydrologic extremes have always plagued our vast nation. In 2011 the nation experienced severe drought in Texas and Oklahoma, snowmelt flooding in the northern tier states, heavy rainfall flooding over the Ohio and Middle Mississippi River Valleys that lead to flooding along the Lower Mississippi River and inland flooding from tropical systems along the east coast states and into New England. Each of these phenomena has its own unique set of risks and associated safety protocols. For more information on these and other hydrologic extremes, refer to:
<http://www.nws.noaa.gov/floodsafety/index.shtml>

Flood Insurance

Flood losses typically are not covered in homeowner insurance policies; however, flood insurance is available in communities taking part in FEMA National Flood Insurance Program. FEMA's FloodSmart campaign promotes the idea that all Americans should know their flood risk and choose the appropriate flood insurance. For more information on flood insurance, refer to:
<http://www.floodsmart.gov>

Flood Safety and a Weather Ready Nation

In partnership with other government agencies, researchers, and the private sector, NWS is charting a path to a Weather-Ready Nation by:

- Improving the precision of weather and water forecasts and effective communication of risk to local authorities
- Improving weather decision support services with new Initiatives, such as the development of mobile-ready emergency response specialist teams
- Providing innovative science and technological solutions, such as the nationwide implementation of Dual Pol radar technology, Integrated Water Resources Science and Services, and the Joint Polar Satellite System
- Strengthening joint partnerships to enhance community preparedness
- Working with weather enterprise partners and the emergency management community to enhance safety and economic output and effectively manage environmental resources

The ultimate goal of the Weather Ready Nation vision is to save more lives and protect livelihoods and the economy as communities across the country become increasingly vulnerable to extreme weather events. For up-to-date weather and flood information and more on NWS, visit:
<http://www.weather.gov>

For more on the Weather Ready Nation initiative and projects, visit:
<http://www.nws.noaa.gov/com/weatherreadynation>

NOAA's mission is to understand and predict changes in the Earth's environment, from the depths of the ocean to the surface of the sun, and to conserve and manage our coastal and marine resources.

Visit NOAA at: <http://www.noaa.gov>

National Public Information Statements are online at: <http://www.nws.noaa.gov/om/notif.htm>